Transportation and Quality of Life: An Annotated Bibliography

Prepared for:
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November 15, 2010

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Background & summary

The University of Minnesota Tourism Center was contracted to complete an annotated bibliography of quality of life and transportation by November 30, 2010. The bibliography is part of a larger study between the Department of Transportation and University Tourism Center that is qualitatively and quantitatively assessing quality of life and transportation perceptions among Minnesota residents.

The goal of the bibliography phase was to identify and evaluate existing resources that address quality of life and transportation, or similar constructs. As such, various search engines and academic databases were used to identify possible resources. Of these, few directly mentioned a connection between transportation and quality of life. Given the paucity of research in the specific area of interest, the search was expanded to review quality of life models, indicators and measures more holistically. The search revealed a strong set of articles that provide insight into quality of life and the role transportation may play in it.

These articles and their findings will inform the selection and development of quantitative measures for ongoing project.

Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985).The satisfaction with life scale. *Journal of Personality Assessment, 49*(1), 71-75.			
Best Addresses: psychology			
What/Why	How	Results/Findings	Implications
Life satisfaction is the global assessment of people's quality of life according to their chosen criteria. Life satisfaction is important in the research on subjective well-being because summing across individuals' satisfaction within specific domains, which are chosen by researchers, cannot totally represent people's own judgment about their life. The article aimed to develop and evaluate a multi-scale measure of global life satisfaction, the so-called Satisfaction With Life Scale (SWLS).	The research failed to give details about how the scale is developed. Nevertheless, the validity and reliability of the scale was assessed with data from a survey of undergraduate students in a psychology class and volunteer elderly participants.	The SWLS is shown to have ~~–fa~~vorable psychometric properties, including high internal consistency and high temporal reliability. Scores on the SWLS correlate moderately to highly with other measures of subjective well-being, and correlate predictably with specific personality characteristics" (p. 71).	The SWLS can be applied in the research on quality of life and subjective well-being. Although the quality of the evaluation of SWLS in the article was limited by its biased sampling, the validity of the scale is supported by other recent research which utilized this scale (Bergman and Daukantaite, 2009[1]; Philip, Merluzzi, Peterman, and Cronk, 2009[2]; Kostka and Violetta, 2010[3]; Tovar-murray, 2010[4]).

[1] Bergman, L., & Daukantaite, D. (2009). Stability of typical patterns of subjective well-being in middle-aged Swedish women. *Journal of Happiness Studies, 10*(3), 293-311.

[2] Philip, E. J., Merluzzi, T. V., Peterman, A., & Cronk, L. B. (2009). Measurement accuracy in assessing patient's quality of life: To weight or not to weight domains of quality of life. *Quality of Life Research, 18*(6), 775-782.

[3] Kostka, T., & Jachimowicz, V. (2010). Relationship of quality of life to dispositional optimism, health locus of control and self-efficacy in older subjects living in different environments. *Quality of Life Research, 19*(3), 351-361.

[4] TOVAR-MURRAY, D. (2010). Social health and environmental quality of life: Their relationship to positive physical health and subjective well-being in a population of urban African Americans. *Western Journal of Black Studies, 34*(3), 358-366.

Farquhar, M. (1995). Definitions of Quality-Of-Life - A taxonomy. *Journal of Advanced Nursing, 22,* 502-508.			
Best Addresses: nursing studies			
What/Why	How	Results/Findings	Implications
~~–~~Definitions of quality of life (QOL) are as numerous and inconsistent as the methods of assessing it. (p. 502)" The article aims to better understand the QOL by categorize the definitions of quality of life emerged from the literature. Description and examples of each types of definition were given.	Literature Review	This is theoretical research. QOL could be defined in four ways: global definition, component definition, focused definition, and combined definition. The global definitions are the most-widely used, which usually define QOL with ideas of satisfaction/dissatisfaction and happiness/unhappiness. The component definitions utilize the component or dimensions of life to define QOL. For example, George and Bearon (1980) define QOL with general health, functional status, socioeconomic status, life satisfaction, and self-esteem. The focused definition refers to only one or a small number of the components for quality of life, such as health-related quality of life. The definitions overlap: definition types are combination definitions.	The article gives a clear taxonomy of the definition of QOL. It sheds light on the perspectives from which QOL is studied.

Ferrans, C. (1996). Development of a conceptual model of quality of life. *Scholarly Inquiry for Nursing Practice: An International Journal, 10*(3), 293-304.			
Best Addresses: quality of life			
What/Why	How	Results/Findings	Implications
Quality of life (QOL) is a critical concept for health care, due to its role in decisions to stop life-sustaining treatment and in debates regarding physician-assisted suicide. This concept is also important in the evaluation of treatment and for the decisions regarding allocation of health care services. The article aimed to clarify the definition of QOL and to identify attributes of this concept. It presented how to develop a concept using a variety of approaches. The finally goal of this effort was to develop an instrument to measure QOL. In this research, QOL was defined as —a person's sense of well-being that stems from satisfaction or dissatisfaction with the areas of life that are important to him/her" (p. 296).	The authors integrated critical literature analysis, qualitative methodologies, and quantitative approaches to develop the conceptual model of quality of life. The individualistic ideology was chosen based on the literature review. To define the components of QOL, the authors conducted 40 interviews with hemodialysis regarding components of a satisfying life. 40 aspects of lives were identified through the discussion of the best possible life and the worst possible life. Then, a literature review was conducted. The dimensions identified in literature review were synthesized with the original qualitative analysis. A list of 32 elements of quality of life for the general population was developed. These elements included usefulness to others, stress or worries, satisfaction with life, standard of living, job, and children. The Ferrans and Powers Quality of Life Index (QLI) was developed based on these elements. In the third phase, these elements were clustered with the data from the survey of 349 randomly drawn hemodialysis patients in Illinois. A cross-cultural work with African Americans and Mexican Americans was also presented to evaluate the QLI.	The authors did not present details about the data collection and analysis. The results showed that quality of life has four major domains, including health and functioning domain, psychological/spiritual domain, social and economic domain and family domain. Each domain has at least four items. For example, the social and economic domain includes the items of standard of living, financial independence, home(house, apartment), neighborhood, job/unemployment, friends, emotional support from others, and education. Transportation was not included in this model. The cross-cultural research proved that the model was appropriate for various population segments	The index developed by the author (the Ferrans and Powers Quality of Life Index, QIL) is widely cited in the research of QOL (Bartels et al. 2009[5]; Carr, E. R., 2008[6]; Girardi Paskulin, L. M., et al., 2010[7]). In addition, this research emphasized the importance of various elements. The author proposed that different people value different things for their quality of life.

[5] Bartels, M., & Boomsma, D. I. (2009). Born to be happy? the etiology of subjective well-being. *Behavior Genetics, 39*(6), 605-615. doi:10.1007/s10519-009-9294-8

[6] Carr, E. R. (2008). Quality of life for our patients: How media images and messages influence their perceptions. *Clinical Journal of Oncology Nursing, 12*(1), 43-51. doi:10.1188/08.CJON.43-51

7 Girardi Paskulin, L. M., Cordova, F. P., da Costa, F. M., & Carneiro Vianna, L. A. (2010). Elders' perception of quality of life. Acta Paulista De Enfermagem, 23(1), 101-107.

The World Health Organization Quality of Life Assessment (the WHOQOL Group). (1998). The World Health Organization quality of life assessment (WHOQL): Development and general psychometric properties. *Social Science Medicine*, *46*(12), 1569-1585.			
Best Addresses: health related quality of life			
What/Why	How	Results/Findings	Implications
The article presented the field testing, empirical derivation and psychometric properties of World Health Organization (WHO)'s quality of life assessment. WHO aimed to develop and assess a more reliable and valid instrument to measure quality of life (QOL) than early attempts at assessments of health and functional status.	The scale was developed by expert review, focus groups, and "expert and lay-question writing panels" (p. 1570). The surveys were conducted in 15 selected international "field centres"(p. 1571), including University of Washington, U.S. A.,Science University of Tokyo, Japan, and University of Bath, UK. In each "centre", a minimum of 300 respondents were surveyed.	This research developed a holistic quality of life measurement, the so-called WHOQOL-100, which covers six "life domains and facets". These "life domains and facets" are "physical, psychological, level of independence, social relationships, environment, spirituality/religion/personal beliefs" (p. 1572). Every domain has at least three facets. For example, the environment domain has 9 facets: (1) freedom, physical safety and security, (2) home environment, (3) work satisfaction, (4) financial resources, (5) health and social care (accessibility and quality), (6) opportunities for acquiring new information and skills, (7) participation in and opportunities for recreation/leisure activities, (8) physical environment (pollution/noise/traffic/climate), and (9) Transport. Every facet is measure by several items. For example, transport is measured with 4 questions: "To what extent do you have adequate means of transport?" "To what extent do you have problems with transport?" "How satisfied are you with your transport?" "How much do difficulties with transport restrict your life?" The authors eliminated items by analyzing the item-response distribution, item-facet reliability analysis, and examination of item correlations with other facets. Then, the correlation between facets and general quality of life was tested to test the validity of the instrument. The correlation between facets and domains was also tested.	Longitudinal data is necessary to further evaluate the instrument. In addition, "given the anticipated widespread clinical use of the WHOQOL, it is necessary to examine how a range of physical, psychological and social interventions impact on both general and specific aspects of quality of life and whether or not the WHOQOL can detect such changes" (p. 1585) The WHOQOL-100 quality of life measurement is widely used in measuring quality of life (Iwasaki, 2007[8]; Tesch-Roemer, Motel-Klingebiel, and Martin, 2008[9]; Woodcock, Laura, McGregor, and Faith, 2009[10]; Amit and Litwin, 2010[11]).

[8] Iwasaki, Y. (2007). Leisure and quality of life in an international and multicultural context: What are major pathways linking leisure to quality of life? *Social Indicators Research, 82*(2), 233-264.

[9] Tesch-Roemer, C., Motel-Klingebiel, A., & Tomasik, M. J. (2008). Gender differences in subjective well-being: Comparing societies with respect to gender equality. *Social Indicators Research, 85*(2), 329-349.

[10] Woodcock, A., Camfield, L., McGregor, J. A., & Martin, F. (2009). Validation of the WeDQoL-goals-Thailand measure: Culture-specific individualised quality of life. *Social Indicators Research, 94*(1), 135-171.

[11] Amit, K., & Litwin, H. (2010). The subjective well-being of immigrants aged 50 and older in Israel. *Social Indicators Research, 98*(1), 89-104.

Cummins, R. (2000). Objective and subjective quality of life: An interactive model. *Social Indicators Research, 52*(1), 55-72.			
Best Addresses: quality of life			
What/Why	How	Results/Findings	Implications
During 1998, there was a vigorous debate concerning the definition of quality of life (QOL). The main issue of this discussion what ―the nature of the relationship between objective and subjective measures of life quality" (p. 55). The study aimed to discuss the relationship between objective and subjective quality of life indicators based on previous research.	Literature review	This is theoretical research. The research concluded that ―Objective and subjective indicators constitute independently useful estimates of the QOL construct" (p.68); however, when the objective conditions of living are very poor, objective and subjective indicators are increasingly associated.	QOL measures tend to inter-correlate, which means a few key variables strongly influence other QOL variable. The article did not give information about what key variables are; however, it provided some examples: ―people with highly paid jobs tend to be better educated and healthier" (p. 59) and ―people who are happy also tend to be satisfied with their lives, and to have low indices of depression".

Metz, D. H. (2000). Mobility of older people and their quality of life. *Transport Policy, 7,* 149-152.			
Best Addresses: gerontology			
What/Why	How	Results/Findings	Implications
The aging society raises the issue of age-associated disability. The mobility impairment is a key distraction of the elderly quality of life (QOL). In spite of the importance of mobility and QOL research, "the relationship between mobility and quality of life in old age is ill defined" (p. 149). The article aimed to stimulate debate about the concept of "mobility". It provided a brief summary and analysis the concepts of mobility and the components of mobility.	Literature review	This is theoretical research. The author stated that the meanings of mobility vary in different contexts. In some contexts, mobility refers to travel, such as the total passenger-kilometers travelled, while in other contexts, it does not carry the implication of travel. In addition, mobility is defined with a wide range of spatial scales and temporal periodicities. Accessibility is often linked with mobility; however, the relationship between the two concepts is still vague. The author also pointed out five key elements of mobility: (1) travel to achieve access to desired people and places, (2) psychological benefits of movement, (3) exercise benefits, (4) involvement in the local community, and (5) potential travel. The author argued that developing an operational concept of mobility is desirable to measure a group of benefits associated with individual movement.	The article provided a way in which to study mobility, especially of the elderly.

Shafer, C., Lee, B., & Turner, S. (2000). A tale of three greenway trails: User perceptions related to quality of life. *Landscape and Urban Planning, 49,* 163-178.			
Best Addresses: transportation investment valuation			
What/Why	How	Results/Findings	Implications
The funding on multi-model transportation systems is increasing with the hope to create communities with sustainable and high quality of life. Green trails are an important component of the multi-model transportation system. Evaluation of the contribution of greenway trails on QOL is, thus, valuable. Based on the human ecosystem concept, this research studied whether and how greenway facilities were contributing to QOL and how people might perceive such contributions based on the way they used the trail.	The authors conducted two-phases of research. In the first phase, on-site interview was conducted, focusing on basic aspects of trail use behavior, including ~~p~~people's origin and destination of travel, length of time spent on trail for this trip, who they were using the trail with, mode of travel and impressions of the trail" (p. 169). In the second phase, respondents recruited in the first phase were surveyed with a mail questionnaire. The questionnaire included questions designed to gather information on ~~p~~people's trail use, perceived conditions of the trail and the way people felt about the trail's contribution to their community" (p. 169). 1004 trail users filled out the on-site survey and 889 agreed to attend the mail-back survey. A total 568 trail users responded to the mail (off-site) portion of survey for a response rate of 64%.	Trails have contributed most to community QOL through health and fitness, the provision of natural areas, accessible recreation, land use patterns, pride in the community, and community identity in the perception of trail users. Nevertheless, commuters, recreationists and mixed users differ significantly in the way they perceived trails' contributions to QOL items.	This research provided useful information which can be employed to identify shortcomings in current facilities, to develop new facilities, to develop and justify planning strategies and/or evaluate usefulness in achieving agency objectives. In addition, the article mentioned that traditionally, the effectiveness of transportation enhancement investment has been measured through criteria like ~~a~~average trip length, percentage of single occupancy vehicle, energy consumption, and the generation of externalities like air pollution, green-house gas emissions" (p. 164). These criteria have fundamental problems in how they were selected and in how to clarify them in practical use.

Sirgy, M., Rahtz, D., Cicic, M., & Underwood, R. (2000). A method for assessing residents' satisfaction with community-based services: A quality-of-life perspective. *Social Indicators Research, 49*(3), 279-316.			
Best Addresses: community quality of life			
What/Why	How	Results/Findings	Implications
Communities need to accurately assess their resources to achieve success. To ensure this accurate assessment, community's quality of life is considered as a measure of communities' resources. The article aimed to measure community citizenry's satisfaction with government, business, and non-profit services. The measure of satisfaction was formed within the QOL context. A model about overall quality of life and specific determinants of quality of life were developed based on the bottom-up spill-over theory.	The measurement Sirgy et al. developed comprised 13 life domains, including job situation, financial situation, health, education, friends and associates, leisure life, neighborhood, community, spiritual life, environment, housing situation, cultural life, social status, and 3 community services, including government services, business services and nonprofit services. The life domains were identified by literature review. Then, they were pretested with convenience sampling. Community services were identified in the sample-specific pretest. The model was tested and edited through LIREL. In the mail survey, four samples were drawn: two in the U.S. A., two in Australia. The total sample size is about 250 respondents, with a response rate lower than 30 percent.	Global satisfaction with family, financial life, health, leisure, and spiritual life are strongly predictive of global life satisfaction. In addition, the global satisfaction of government, business, and provided services are predictive of global community satisfaction, which is also predictive of global life satisfaction.	This research provided a community QOL assessment method which allows community leaders to identify areas of community strengths and weaknesses or strategic gaps for possible action.

Christakopoulou, S., Dawson, J., & Gari, A. (2001). The community well-being questionnaire: Theoretical context and initial assessment of its reliability and validity. *Social Indicators Research*, *56*(3): 321-351.			
Best Addresses: community well-being			
What/Why	How	Results/Findings	Implications
Comprehensively understanding community well-being contributes to community- related policy, including policy initiatives emerging to regenerate communities. The article aimed to develop and assess a community well-being questionnaire which could "validly, reliably, comparably and comprehensively" (p. 322) describe community well-being, and could provide central information for policy makers from a different perspective, than from standard data sources. The questionnaire is also designed to be a "replicable benchmark of community well-being to allow comparisons over time" (p.323).	To develop the questionnaire, the authors first identified different community well-being elements from an extensive literature review of theoretical and empirical studies, and organized them into six parts: (1) a place to live, (2) a social community, (3) an economic community, (4) a political community, (5) a personal space, and (6) a part of city. For example, the part entitled "the community as a place to life" incorporated two scales: a scale of satisfaction with specific aspects of living conditions and a personal safety scale. The questionnaire consisted of 45 items with a 7-point scale, including 11 items directly related to transportation. These transportation-related items fell into different factors. For example, the factors of "satisfaction with services and facilities" include items "public transport" and access to cultural facilities, medical services, sports and leisure facilities, and shopping areas (p.336). In addition, the factor "satisfaction with environmental quality" included items of "amount of traffic" and "parking facilities" (p.337). To test the questionnaire, three interviewer-administrated surveys were conducted in Ireland, U.K. and Greek. 706 interviews were completed, with a 68% response rate.	The Cronbach's alpha coefficient in all the scales for the total sample exceeded 0.7 which indicate the internal consistency of the scales. Factor analysis supported the authors' initial hypothesis about item and factor structure. The construct validity of the scales was also assessed "by testing the established theoretical links between community well-being scales and other variables" (p. 340), such as the links between the personal safety scale and perception of crime in the area. The data from the study in Greece was used to assess the test-retest reliability of the scales and items of the questionnaire	The article provided a comprehensive procedure with which we can develop and test a question-naire.

Kenyon, S., Lyons, G., & Rafferty, J. (2002). Transport and social exclusion: Investigating the possibility of promoting inclusion through virtual mobility. *Journal of Transport Geography*, *10,* 207-219.			
Best Addresses: social exclusion			
What/Why	How	Results/Findings	Implications
Social exclusion is defined in this article as ~~"t~~he unique interplay of a number of factors, whose consequence is the denial of access, to an individual or group, to the opportunity to participate in the social and political life of the community, resulting not only in diminished material and non-material quality of life, but also in tempered life chances, choices and reduced citizenship" (p. 209). The study aimed to study the relationships between social exclusion and transport by consolidating the literature. The ability of information and communication technologies (ICTs) including the Internet to reduce social exclusion is discussed.	Literature review	The article stressed the firm distinction between social exclusion and poverty. The article also developed nine key dimensions of exclusion including: economic, societal, social networks, organized political, personal political, personal, living space, temporal, and mobility. Several potentially exclusionary factors were given for each dimension. In addition, the article emphasized the mobility-related exclusion. It stated that "~~l~~ack of mobility is a contributory factor within each dimension and towards many exclusionary factors."	The article introduced a mobility dimension to social exclusion. It indicated mobility is important to enable participation in modern society.

Alber, J., Delhey, J., Keck, W., Nauenburg, R., Fahey, T., Maitre, B., Whelan, C., Anderson, R., Domanski, H., Ostrowska, A., Olagnero, M., & Saraceno, C. (2004). Quality of life in Europe: First European Quality of Life Survey 2003. Retrieved from http://www.eurofound.europa.eu/pubdocs/2004/105/en/1/ef04105en.pdf			
Best Addresses: quality of life			
What/Why	How	Results/Findings	Implications
The European Foundation for the Improvement of Living and Working Conditions studied quality of life (QOL) in 28 countries--15 European Union (EU) Member States (before May 2004), 10 new Member States which joined the EU in May 2004 (NMS), and three candidate countries (CC3). The purpose of the study is to compare the situation in different countries.	The researchers conducted random sampling surveys in 28 countries. The surveys were administrated by in-person interview. Around 1,000 persons aged 18 and over were interviewed in each country. The overall response rate was 58.4%. From previous studies, the researchers selected six core areas of QOL including employment, economic resources, family and households, community life and social participation, health and health care, and knowledge, and education and training. These areas were assessed both with self-reported objective conditions, such as household composition and health status, and individual's perception of certain topic, such as job security, satisfaction with public services. The researcher also measured two subjective perceptions, including subjective well-being and perceived quality of society.	This research was primarily descriptive. The results showed that living conditions in European countries were different. For example, NMS and CC3 have lower living standards, housing conditions, and longer working time. In addition, the research found that "in line with their lower levels of material and subjective well-being, citizens in the NMS/CC3 have a more critical view than EU 15 citizens of the quality of public services" (p. 83).	The research presented how to measure QOL at the national level. In this research, QOL was measured with both objective and subjective indicators, including individual's self-report objective conditions, subjective perception and few social-economic indicators, such as employ rate.

Poortinga, W., Steg, L., & Vlek, C. (2004). Values, environmental concern, and environmental behavior: A study into household energy use. *Environment and Behavior, 36,* 70-93.			
Best Addresses: environment			
What/Why	How	Results/Findings	Implications
Household energy consumption is a global environmental problem that linked to individual behavior. The article aimed to ―xplore the value basis of environmental behavior in the field of household energy use" (p. 71). Quality of life (QOL) is used as a measure of basic human values. It adopted the hierarchical model for environmental behavior of Stern et al. (cited in p. 72) as the research framework.	The authors developed a list of twenty-two subjective QOL indicators which used to measure values, based on an extensive literature review on ―needs, values, and human well-being in relation to sustainable development" (p. 73). These indicators included aesthetic beauty, comfort, freedom, health, leisure time, safety and status/recognition. Then, a multi-phase questionnaire survey was conducted. In total, 455 respondents returned completed questionnaire, a respondent rate of 22.8%.	The QOL aspects developed in the literature review are summarized into seven interpretable value dimensions. These dimensions are (1)self-enhancement, (2)environmental quality factor, (3)self-direction, (4)openness to change, (5)appreciation, understanding and acceptance of oneself, others and surrounding world, (6)family, health and safety, and (7)achievement. The authors concluded that values, environmental concern contributed significantly to explain residents' policy support for government regulation and market strategies, and to explain residents' acceptability of specific home and transport energy-saving measures.	The twenty-two quality of life aspects developed in the study are valuable due to their unique perspective regarding quality of life as individual's value on which other behaviors are based.

Jeon, C., ASCE, S. M., & ASCE, A. (2005). Addressing sustainability in transportation systems: Definitions, indicators, and metrics. *Journal of Infrastructure Systems, 11*(1), 31-50.			
Best Addresses: transportation system			
What/Why	How	Results/Findings	Implications
The article assessed selectsustainable transportation initiatives in North America, Europe, and Oceania to characterize what constitutes sustainability in transportation system and how to measure them.	Literature review Case study	The article concluded that while there is no standard definition for transportation sustainability, there is emerging consensus that sustainability should include impacts on the economy, environment, and social well-being, and should address the causes of sustainable or non-sustainable trends (p. 49). In addition, the article presented that transportation system sustainability is largely being measured by transportation system effectiveness and efficiency as well as the environmental impacts of the system.	This article developed six pages of indicators and metrics for sustainable transportation system

Steg, L., & Gifford, R. (2005). Sustainable transportation and quality of life. *Journal of Transport Geography, 13*, 59-69.			
Best Addresses: sustainable transportation			
What/Why	How	Results/Findings	Implications
Increasing automobile use impacts the sustainability of transportation system. Various strategies have been applied to promote sustainable transportation; however, people's acceptability of strategies is different. The acceptability is largely determined by how potential sustainable transport plans influence people's quality of life (QOL). The research described how to examine whether certain transportation systems are sustainable and acceptable, or not.	Literature Review	Steg and Gifford showed that sustainable transportation is mainly investigated by examining the positive and negative values and externalities of current transportation such as energy and land use, waste, traffic safety, traffic noise, health consequences, accident costs, accessibility and economic wealth. The authors also introduced the method for assessing effects of transportation plans on QOL. They provided a list of 22 quality-of-life indicators, including health, safety, privacy, work and aesthetic beauty. These indicators were developed based on needs, values and human well-being (cited in Poortinga et al., 2004[12]). The authors stated that the effect of transportation plans on QOL can be assessed by "asking respondents to indicate the extent to which various sustainable transportation scenarios would affect relevant QOL indicators in positive or negative ways" (p. 62).	The research suggested that potential sustainable transportation systems should be evaluated in terms of their influence of QOL. It also justified that studying quality of life is important in sustainable policy making.

[12] Poortinga, W., Steg, L., & Vlek, C. (2004). Values, environmental concern, and environmental behavior: A study into household energy use. *Environmentl and behavior, 36,* 70-93.

Moons, P., Budts, W., & Geest, S. (2006). Critique on the conceptualization of quality of life: A review and evaluation of different conceptual approaches. *International Journal of Nursing Studies, 43*, 891-901.			
Best Addresses: nursing studies			
What/Why	How	Results/Findings	Implications
The definition of quality of life (QOL) remains vague despite its increasingly use in biomedical and nursing research. The article reviewed and critiqued different conceptualizations of QOL, with the ultimate goal of making QOL a less vague concept by reviewing and critic.	Literature Review	The article adopted the Ferrans' taxonomy of QOL conceptualizations and grouped them into eight broad categories: normal life, social utility, utility, happiness/affect, satisfaction with life, satisfaction with specific domains, achievement of personal goals, and natural capacity (p. 894). The authors gave a brief summary about what each category focuses on. For example, the category named ―satisfaction with specific domains" includes QOL definitions which refer to the ―satisfaction one experiences in various domains of life, such as love, marriage, friendship, leisure, job, etc."(p. 894). The article also described six conceptual problems inherent to the notion of QOL. It also concluded that defining QOL in terms of life satisfaction is most appropriate.	The article gave a comprehensive overview and evaluation about the existed definitions of QOL. It also pointed out that indicators and determinants of quality of life are distinguished.

Jeon, C., Amekudzi, A., & Vanegas, J. (2006). Transportation system sustainability issues in high-, middle, and low-income economics: Case studies from Georgia (U.S.), South Korea, Colombia, and Ghana. *Journal of Urban Planning and Development, 132*(3), 172-186.			
Best Addresses: transportation system			
What/Why	How	Results/Findings	Implications
Sustainability increasingly becomes important in transportation system and service provision. However, the discussions on transportation system, which are at a relatively general level, are insufficient to understanding unique issues in different socioeconomic contexts. The article aimed to present an overview about some major issues in transportation sustainability in high-, middle-, and low-income economies.	Case studies of four countries/states: Georgia, South Korea, Colombia, and Ghana.	Standards for attaining sustainability within communities with different socioeconomic conditions should be localized and "movement toward sustainability" is a more realistic objective than "achieving sustainability" (p. 184). The article also suggested that data available on different aspects of transportation systems vary widely in adequacy and completeness. The data about the relative levels of accessibility cannot be found.	This article presented how to define or describe a transportation system. It conceptualized transportation system with five dimensions including system effectiveness, safety, congestion/air quality, social equity/other issues, and transportation/land use decision making (p. 175).

Howard J. (2007). How much does transportation affect your life. Retrieved from Transportation Demand Management Research Center website: http://www.commuterpage.com/research/study_list.asp?jobID=ACCS016&studyID=91 .			
Best Addresses: transportation			
What/Why	How	Results/Findings	Implications
The purpose of the research was to assess the performance of transportation from the perspective of quality of life (QOL). The research focus on differences between groups of residents who used various modes of transportation. The research studied residents' travel modes and satisfaction with transportation in Arlington County.	The researcher conducted telephone and on-line surveys. 509 and 810 residents completed the questionnaire on telephone and on-line, respectively. The questionnaire asked residents to rate the importance and satisfaction of QOL factors and transportation features. The researcher identified six ways to travel: including drive, train, bus, carpool/vanpool, bike, and walk. Based on this, the author developed three types of travel modes: alternative modes only, alternative modes and drive alone, and drive only. The travel pattern was studied from four perspectives: residents' mode profiles, commute travel, non-work travel, and awareness and use of travel information and services. To assess the transportation system from the perspective of quality of life, the research first assessed the importance of QOL factors, including health and transportation system and services. In the questionnaire, respondents were asked to rate the importance of each QOL factor. Then, the importance of features of transportation to quality of life were directly evaluated with the question ―Please tell me how important each of the attributes is in terms of your overall quality of life?" The questionnaire also measured the overall satisfaction with Arlington County transportation system, and the levels of how easy or difficult to get around Arlington County with different travel modes. Eleven factors were used in this research to measure QOL: safety, attractive residential communities, transportation system and services, and ease of getting around the area. The 7 features of transportation the researcher selected included cost, convenience, comfort, and ease of getting to other destinations with or without a car.	The research described the personal demographics, household demographics and employment characteristics of users of different travel modes. For example, the result showed that alternative mode users are younger, less affluent, and more likely to work for a large organization and/or a federal agency. The difference among users of different modes was discussed. The research also identified motivations for alternative modes, such as lack of parking, save money and get exercise. In addition, residents with different travel modes showed differences in their perception of the importance of QOL factors. Bus riders rated QOL factors generally lower than other residents, while bicyclists rated QOL factors higher than other mode groups. Furthermore, the research concluded that transportation is an important determinant of QOL.	The research indicated that transportation officials needed to address needs of different travel modes users in their management and services.

Das, D. (2008). Urban quality of life: A case study of Guwahati. *Social Indicators Research, 88,* 297-310.			
Best Addresses: urban quality of life			
What/Why	How	Results/Findings	Implications
The article studied the quality of life in the urban environment of a Japanese city. The article defined and measured quality of life using both objective condition (which refers to objective quality of life), and satisfaction from living conditions (which refers to subjective quality of life).	The researcher conducted 379 household interviews with a structured questionnaire which included questions on demographic information, objective dimensions and subjective dimensions.	34 QOL variables factor analyzed into seven identified patterns: ~~"~~quality of physical environment, urban amenity, socio economic condition and satisfactions from such condition" (p. 303). Although both objective conditions and subjective satisfaction are important dimensions of QOL, the correlation between objective and subjective QOL is not high. Satisfaction from condition of traffic is the lowest among all satisfaction variables. Traffic condition was measured in a single item.	The research pointed out that any comprehensive evaluation of quality of life should include subjective as well as objective aspects. In addition, the article claimed that several studies showed the poor correlation between objective and subjective dimension of QOL, but it failed to clarify what these studies are.

Doi, K., Kii, M., & Nakanishi, H. (2008). An integrated evaluation method of accessibility, quality of life, and social interaction. *Environment and Planning: Planning and Design, 35,* 1098-1116.			
Best Addresses: public policy			
What/Why	How	Results/Findings	Implications
Conventional accessibility measures fail to include people's values or behavioral criteria and ability, which reduce their value for planners to evaluate practical issues. The research focused on peoples' values or behavioral criteria and ability, rather than a ~~"h~~ighly simplified representation of opportunities" (p.1098) in the measurement of quality of life (QOL), accessibility and social interaction. The article aimed to develop an alternative evaluation method of accessibility from the viewpoint of location efficiency and QOL.	This is theoretical research. The research first formulated a basic QOL function based on the logic linkage between QOL and a value system. Then, ~~"b~~y solving a QOL maximization problem consistent with consumers' choice, an alternative accessibility measure is devised as a location-efficiency indicator and QOL measure" (p. 1099). In the third phase, the researchers applied a ~~"m~~etagame approach" (p. 1099) to explore a generalized framework of QOL evaluation.	A QOL-based accessibility measure and a QOL performance measure were developed.	The article integrated people's value and criteria into the measurement of quality of life and accessibility, which provided a new perspective, from which QOL can be conceptualized and constructed.

Bartels, M., Boomsma, D. (2009). Born to be happy? The etiology of subjective well-being. *Behavior Genetics, 39,* 605-615.			
Best Addresses: Psychology			
What/Why	How	Results/Findings	Implications
Subjective well-being (SWB) can be assessed with overlapping and specified measures which represent distinct concepts, such as satisfaction with life, happiness, quality of life, and life fulfillment. Individuals present differences in the evaluation of subjective well-being. Previous research found that individual differences can be explained by genetic effects and environmental influences which are unique to an individual. However, these previous studies have not addressed the question ―fithe distinct constructs of well-being have different etiologies" (p. 606). The article aimed to investigate the individual differences in SWB. The differences among four SWB measures, including satisfaction with life, happiness, quality of life, and life fulfillment.	The authors conducted surveys with a sample of adolescent twins and their siblings aged from 13 to 28 years old. The overall sample size was 5,024 subjects from 2,157 families, with the response rate of 56.1%. The article did not give information about how the questionnaire survey was administrated. The instrument utilized in surveys was the Dutch Health Behavior Questionnaire (DHBQ) which included four measures of SWB: quality of life in general, satisfaction with life, quality of life at the moment of measurement, and subjective happiness. Quality of life was measured with the Cantril Ladder (Cantril, 1965, cited in p. 607) Data were analyzed with multivariate genetic modeling to explore the etiology of individual differences among SWB measures.	The result showed that the four measures of SWB are not genetically distinct, which made it possible to compare studies using these measures. The result also showed that genetic and non-shared environmental influences explain individual differences. The article did not specify what the genetic and non-shared environmental influences are. In addition, the research found that ―sex differences are not of importance for either mean levels of four SWB measures" (p. 612), while the age had a small but significant negative effect on mean levels of SWB.	The research indicated that about half of people's SWB is determined by their inheritable nature. In addition, the article also suggested that quality of life, satisfaction with life, and life fulfillment can be used interchangeably.

Feng, C., & Hsieh, C. (2009). Implications of transport diversity for quality of life. *Journal of Urban Planning and Development, 135*(13), 13-18.			
Best Addresses: transportation diversity			
What/Why	How	Results/Findings	Implications
Transportation diversity, defined as ~~–d~~ifferent levels of satisfaction within stakeholder needs, expressed as appropriate indicators and measured using the variations in achievement among indicators" (p. 14), is important to individual's quality of life and the society's sustainability. This study aims to construct a framework for evaluating transport diversity based on the needs of stakeholders to promote quality of life.	This is conceptual research. Transport diversity was calculated with equation derived from the Shannon-Weaver indexrichness, (number of stakeholder groups), and equability (measured by the evenness of needs distribution across groups). Stakeholder needs are determined based on criteria of sustainability as well as quality of life.	A conceptual framework thatlinked transport diversity, sustainability and quality of life was developed. Sustainability and quality of life are conceptualized with three components: economic efficiency, social equity and environmental quality. Transport stakeholders are indentified as (1) general users, including bus users, railway users, pedestrian (bicycle) and motor users, (2) specific users, including lower-income users, disabled users, elderly users, and remote users, and (3) non-users, including government, residents, and operators.	The article presented a conceptual framework to understand the transportation system and its characteristics promoting sustainability and quality of life. It also pointed out that transport diversity is a new tool for assessing improvement in quality of life.

Florindo, A., Guimaraes, V., Cesar, C., Barros, M., Alves, M., & Goldbaum, M. (2009). Epidemiology of leisure, transportation, occupational, and household physical activity: Prevalence and associated factors. *Journal of Physical Activity and Health, 6,* 625-632.			
Best Addresses: Physical activity			
What/Why	How	Results/Findings	Implications
There are four major types of physical activity: in occupational, transportation, household, and leisure settings. These four types of physical activity are important to promote active lifestyle and, thus, to prevent chronic diseases. Thus, the analysis of these types of physical activity is ―fundamental" (p. 625); however, the research on the prevalence of these four types of physical activity is insufficient in epidemiological analysis. The article aimed to fill the gap by studying the prevalence of and factors associated with insufficient levels of physical activity in transportation, leisure, occupational, and household settings. The study was conducted in the city of Sao Paulo, Brazil, from the perspective of epidemiology. Insufficient level of physical activity was defined in this article as ―situation in which the individual did not reach the recommendation of 150 minutes per week, in occupational, transportation, household or leisure activities" (p. 626).	The authors utilized the data from the Health Survey of the Municipality of Sao Paul, which was conducted in 2003 with a sample of 3,357 respondents including children, adolescents, adults, and elderly people. To assess physical activity levels, the authors utilized the official Portuguese long version of the International Physical Activity Questionnaire (IPAQ), which evaluated physical activities separately within occupational, transportation, household, and leisure settings. In addition, the authors described the prevalence of different types of physical activity according to socioeconomic, demographic and behavioral characteristics, and health-related variables. The prevalence of insufficient levels of physical activity was also compared between different groups of people, for example with different age and gender.	Overall, 7.3% of the subjects were insufficiently active. Transportation was ―the setting with the highest proportion of low activity level, followed sequentially by leisure, occupation, and household settings" (p.627). Certain groups present greater prevalence of insufficient physical activity: female, 60-65 age, nonwhites, lower education level, smoking, and self-reported health status classified as poor or very poor.	The research indicates that as one of the major types of physical activity, transportation should play an important role in promoting people's health, by providing physical activity opportunities in transportation settings, including walking and biking.

Hu, C. (2009). Enhancing quality of life by shifting importance perception among life domains. *Journal of Happiness Study, 10,* 37-47.			
Best Addresses: psychology			
What/Why	How	Results/Findings	Implications
The article aimed to study the relationship between shifting tendency of life domains and satisfaction of life. It assumed that some people tend to lower or higher the importance of certain domains in their hierarchy of quality of life, if the domain is with low or high discrepancy (shift tendency). The article intended to explore whether people with high shift tendency would have high life satisfaction. In addition, the article adopted the theory of response shift which refers to ~~–a~~ change in the meaning of one's self-evaluation of a target construct as a result of (a) a change in the respondent's internal standards of measurement (scale recalibration, in psychometric terms); (b) a change in the respondent's values (i.e. the importance of component domains constituting the target construct); or (c) a redefinition of the target construct (i.e. reconceptualization)" (cited in p. 39)	The study surveyed 332 undergraduate students at a university in Taiwan. A questionnaire measuredsatisfaction, importance and perceived have-want discrepancy of 12 life domains. Global quality of life was also measured. The life domains were selected from the World Health Organization's WHOQOL-100 (WHOQOL, 1998). The Satisfaction with Life Scale (SWLS) was utilized to measure the global life satisfaction. The ~~–S~~hifting tendency" index was computed with discrepancy scores and importance scores.	The research found that shifting tendency positively contributes to global life satisfaction; however, ~~–th~~e association between shifting tendency and average satisfaction and the SWLS were not strong" (p. 44). The research concluded that ~~–p~~eople with stronger tendency of stressing life domains with lower discrepancy and discounting life domains with larger discrepancy have higher life satisfaction" (p. 42). For example, some people have high expectation to physical environment, while they feel strongly dissatisfied about their physical environment. Thus, they have a high discrepancy about physical environment. If these people tend to lower the importance of physical environment to their quality of life (shifting tendency), they will feel happier about their life.	The article indicated that domains of life have different priority in contributing to the quality of life and this hierarchy of life domain can be changed. (First identify the difference of importance between people, in the future research rating the life domains.)

Lotfi, S., & Koohsari, M. (2009). Analyzing accessibility dimensions of urban quality of life: Where urban designers face duality between subjective and objective reading of place. *Social Indicator Research, 94,* 417-435.			
Best Addresses: urban planning			
What/Why	How	Results/Findings	Implications
Objective and subjective dimensions are the two basic groups of components of quality of life; however, the quantitative empirical research on the correlations between these two dimensions remains insufficient. In addition, accessibility to public space is important to urban quality of life. The article aimed to fill this gap by studying the influence of objective aspects and subjective evaluation of accessibility on quality of life.	Literature review The objective dimensions of accessibility quality were measured with GIS. The subjective dimensions were measured by interview. The stratified random sampling was used in the study. 2,471 persons were interviewed with two questions. The first question measured respondents' accessibility satisfaction in a closed form with four options. If the answer was moderate or low, a second question was used to identify the reason of such dissatisfaction.	The neighborhood of B has a higher accessibility compared to public spaces compared to the A. However, in the subjective measuring, only 23% of neighborhood B had high or moderate satisfaction with their accessibility, compared to 87% satisfaction in the unit A. The most important cause to the low satisfaction in unit B is residents' fear of crime, despite the high level of objective accessibility. The article concluded that objective and subjective measuring have considerable differences.	The article indicated that objective conditions of life are not necessarily predictive to subjective satisfaction of life. Thus, urban designers cannot ~~-re~~ly only on the results of objective measuring to understand such spaces for planning" (p. 417). In addition, the authors gave several definitions of accessibility in the article. Generally, accessibility refers to the ease of reaching particular place or the ease with which activities can be reached from a certain place. The article pointed out that accessibility is important to public space in the city, so it is also important to the public-space related quality of life.

Senlier, N., Yildiz, R., & Aktas, D. (2009). A perception survey for the evaluation of urban quality of life in Kocaeli and a comparison of the life satisfaction with the European Cities. *Social Indicators Research, 94,* 213-226.			
Best Addresses: urban quality of life and policy			
What/Why	How	Results/Findings	Implications
Quality of life, as the basic unit of urban sustainability, is important in city development and competition. In particular to ~~"r~~ealize the basic principles of sustainability of European Union for increasing the urban QOL" (p. 214). Researcheabout QOL is being updated for many European cities. The article aimed to evaluate the QOL of Kocaeli, an important Turkish city, and its comparison with similar European cities.	The researchers conducted 300 perception surveys, following the QOL measurement developed by Urban Audit for European cities (as cited p.217). Public transportation is selected as an indicator of quality of life. It is measured with 3 items: (1) public transportation fees are appropriate; (2) parking areas are sufficient; and (3) access to public transportation is easy. The article did not to provide the information of sampling and response rate.	The reliability of the measurement was tested in the factor analysis process. Safety is the most important variable on urban QOL in Kocaeli due to its unique history related to earthquakes and the social situation including crime in the city. In contrast, educational facilities, quality of environment, and public transport have gradually decreasing importance in affecting QOL. Participants in the survey claim that they are satisfied in living in their cities. ~~"C~~ities with highest QOL are in the same time cities with highest economic strength" (p. 225).	In the research, public transport is measured as an aspect of quality of life. In addition, the article gave a detailed literature review about the studies on urban quality of life.

Spinney, J., Scott, D., & Newbold, B. (2009). Transport mobility benefits and quality of life: A time-use perspective of elderly Canadians. *Transport Policy*, (16), 1-11.			
Best Addresses: gerontology			
What/Why	How	Results/Findings	Implications
Transportation mobility, which refers to the physical or mental ability to safely and independently move around, is critical to the quality of life (QOL), particularly among the steadily increasing numbers of elderly. To ensure appropriate and effective policy interventions, it is prudent to understand the impact of transport mobility on social exclusion and QOL. The primary objective of the article was to study a system that measures and better understands the impacts of transport mobility on the QOL for elderly Canadians who are no longer working. The research studied how people getting different levels of transport mobility benefit will influence their perceived QOL.	The authors used Statistics Canada's General Social Survey (GSS) Cycle 12 Time-use data. The participants of the survey keep single-day time-dairies with a five minute temporal resolution about their daily activities. The subjective measures of well-being, including happiness and self-reported satisfaction with several life domains were also measured in the survey. The timing and duration people spent on various activities, including doing sports outside home, volunteer outside home, and visiting other places, were calculated as the psychological, exercise, and community benefit of transport mobility.	The results showed the significant variations in transport mobility benefits by life situation, such as income level and age, and subjective well-being indices. The research indicated significant association between transportation mobility benefits and QOL. The Canada's GSS time-use module has the potential for being applied towards further development of an index of well-being that incorporates the benefits of transport mobility.	Mobility is important to quality of life and well-being of the elderly. The method evaluated in the article can be applied to research on transport mobility's benefit for quality of life.

Cole, R., Burke, M., Leslie, E., Donald, M., & Owen, N. (2010). Perceptions of representatives of public, private and community sector institutions of barriers and enablers for physically active transport. *Transport Policy, 17,* 496-504.			
Best Addresses: transportation and physical activity			
What/Why	How	Results/Findings	Implications
The use of active transport, which refers to "human-powered forms of travel, such as walking, cycling, skating, and manual wheelchairs" (p. 496), is declining in U.S, Australia and U. K. Demographic and environmental factors, including perceptions of traffic and busy roads, determine this decline. On the other hand, active transport is documented beneficial in various aspects, ranging from air quality and sustainability issues to tourism, access and equity, and crime prevention (Goodman and Tolley, 2003; Cavill et al., 2006, cited in Cole et al. 2010, p. 497). The article studied how officials and senior members of public and private sectors and community groups perceive the institutional barriers to, and enablers of active transport.	The authors conducted structured interview in South-East Queensland, Australia. The participants were recruited using a —snowballing-type" procedure. People, working in a broader collaborative active transport initiative were invited to participate in the interview. These people generally —held key roles and responsibilities in determining the availability of infrastructure that may influence active transport" (p. 498). A total of 33 key informants of the initiative were interviewed. Twenty-nine individuals and two small-group (two people) in-depth interviews were conducted. Twenty-one interviews were conducted in-person, and ten interviews were conducted by telephone. The authors justified this method difference with the statement that there was no clear evidence of the differential effect between telephone and face-to-face interviewing. The average interview length was 25 min (ranging from 20 min to 1.5 h). Written notes were used to collect data.	The research identified five key themes regarding institutional and personal barriers and enablers to active transport. These themes were: (1) integrated planning of land uses and infrastructure, (2) attractive public transport services, (3) walk and bicycle-friendly environments, (4) political will and cross-government coordination, and (5) societal travel norms and culture. The results showed that, from the perspective of members of public and private sectors and community groups, public transport assist to increase physical active transport behavior. In addition, a lack of —walking and cycling infrastructure and indirect, unconnected, and impermeable routes" (p. 501) limited the development of active transport. The research also stated that —car culture" of Australia hindered active transport behavior.	To promote active transportation, influencing agencies and all levels of government should work together to establish comprehensive and consistent approaches. In addition, attention needed to be paid in attractive public transport services, and walk and bicycle friendly environments.

Delbosc, A. & Currie, G. (in press in 2010). Transport problems that matter – social and psychological links to transport disadvantage. *Journal of Transportation Geography*. Retrieved from http:// dx.doi.org/10.1016/j.jtrangeo.2010.01.003.			
Best Addresses: transportation			
What/Why	How	Results/Findings	Implications
Transport disadvantage is defined as "a multi-dimensional construct with characteristics associated with location, access to mobility and the limitations on personal access associated with the physical, social and psychological characteristics of individual (p. 2)". This concept directly relates to social exclusion. According to the authors, transport disadvantage can be measured in three ways: location related measures, mobility based measures, and self-reported measures The article aimed to evaluate self-reported measure of transport disadvantage and how these relate to social exclusion and well-being in Melbourne, Australia.	The research conducted a household interview survey. 535 individuals were interviewed. Respondents were asked to rate the difficulty or easy levels of eighteen aspects of transport with a five-point rating scale from "very easy" to "very difficult". Researchers indentified the aspects through literature review. These aspects were (1) covering the costs of your transport; (2) getting to places quickly, (3) finding transport so you can travel, (4) being able to travel when you want to, (5) having to rely on others for transport; (6) being able to get around reliably; (7) being able to physically get onto/off buses; (8) buses/trains/trams being available at night; (9) buses/trains/trams being available at weekends; (10) buses/trains/trams operating frequently; (11) being able to get information about buses/trains/trams; (12) being able to get to bus/train/tram stops/stations; (13) being able to make bus/train/tram connections; (14) feeling safe from theft/ attack when traveling on your own; (15) needing help to get around on your own; (16) being able to understand where to go; (17) finding the time to travel when you need to; (18) finding someone to provide assistance when transport is available.	The result of Kaiser-Meyer-Olkin analysis with a value of .91 indicated the sample size was appropriate. Bartlett's text of sphericity $x^2(153)=2440.23$, $p<.001$, indicated the validity of the scales to conduct principal components analysis (PCA). Poor availability of public transportation was the issue with the highest average difficulty noted in the results. In addition, "lack of services available at night and at weekend", "having to rely on others", and "having difficulty finding someone to provide assistance" were all highly rated. In contrast, "being able to physically get onto/off buses/ trains and trams" is not concern of respondents with an average score of 1.9 (rated "easy"). The authors stated that "this is surprising given the high share of senior age cohorts in the sample and the relatively poor physical accessibility provided on public transport". The PCA produced four independent factors of transport problems: transport disadvantage, transit disadvantage, vulnerable/impaired, and rely on others. The analysis established that only the "Vulnerable/Impaired" group, which makes fewer trips, displayed a significantly higher association with social exclusion and lower well-being	This research showed what aspects of transportation are considered difficult or easy by groups of people, including low income group and the elderly. The paper also suggested that some transport problems—which ones? are more important than others and deserve greater attention in policy.

Douma, F. (2010, October). Itasca County area transportation study. Symposium conducted at the Center for Transportation Studies Seminar, Minneapolis, MN.			
Best Addresses: transportation			
What/Why	How	Results/Findings	Implications
The study aimed to identify location and transportation needs of targeted populations, including low income workers, students, and seniors, and to identify barriers and gaps.	The researchers conducted geo-spatial analysis to study the spatial distribution of job, low-wage job, residency, and the residency of older adult population. They also conducted focus groups, listening sessions and interviews to study the needs of Itasca County residences.	The focus group identified three important themes for the transportation in Itasca County: (1) that it is difficult to get around without a car; (2) transit services are not widely known; (3) there is a disconnection between school and transit provides. The listening session emphasized the bike use and the transit. Result shows three problems for transit: inconsistent working schedules, information on what is currently available, and the perception that transit is only for elderly and poor. The listening session also discussed the car pooling and car-sharing.	The research provided information about people's needs for transportation in Minnesota.

Dratva, J., Zemp, E., Diethrich, D., Bridevaux, P., Rochat, T., Schindler, C., & Gerbase, M. (2010). Impact of road traffic noise annoyance on health-related quality of life. *Quality of Life Research, 19,* 37-46.			
Best Addresses: transportation investment valuation			
What/Why	How	Results/Findings	Implications
The study aims to estimate the impact of traffic-related noise annoyance on health related quality of life (HRQOL) and the ~~-p~~otential effect modification by gender (p.37)".	The research conducted a survey with 5,021 respondents. Traffic-related noise was measured on an 11-point scale. HRQOL was measured based on 36-Item short-form health survey (SF-36 scores).	Thirteen percent of the study population reported high annoyance due to traffic. Women were more likely to report noise annoyance. All scales of HRQOL showed a significant negative association with noise annoyance.	This research showed a kind of negative influence of transportation on people's HRQOL.

Hjorthol, R., Levin, L., & Siren, A. (2010). Mobility in different generation of older persons: The development of daily travel in different cohorts in Denmark, Norway and Sweden. *Journal of Transport Geography, 18,* 624-633.			
Best Addresses: Mobility			
What/Why	How	Results/Findings	Implications
The aging population in the Scandinavian countries (Denmark, Norway and Sweden) underscores the research of everyday mobility of this population, because mobility is closely linked with well-being and health of older people, and travel demands of older population influents entire transportation system. In particular, understanding car-use pattern of elderly people is important both for the elderly people and for the entire society. The research had three purposes: (1) better understanding travel patterns of different groups of older people, according to gender and age, and scrutinizing the influence of distribution of transport resources on welfare; (2) examining ~~–t~~ravel and activity patterns during the life course, in other words, which activities cease with age and which remain" (p.625); (3) identifying the trend in elderly people mobility, for example how the ~~–n~~ew" generations of elderly people act, compared to the older ones.	The authors conducted cohort research with the data from National Travel Surveys of Denmark, Norway and Sweden. The surveys were conducted by telephone, in-person, and on-line. This survey lasted about 30 years with high level of consistency and stability, which made it possible to analyze the same generations over time. The study examined Cohort effect, referring to the effects of being born at a specific time in history, along with the period effect and age effect on mobility and welfare characteristics.	The overall response rates of National Travel Surveys of Denmark, Norway and Sweden are 50%, 50% and 69%, respectively. Over two thousand persons were interviewed in each survey. Results showed that car ownership and use among older people is influenced by specific period of time (period effects). For example, the percentage of females aged over 40 holding a driving license increased from 54 to 84 in Norway in the studied the period of time. In addition, generally ~~–w~~omen keep their driving license up to a high age" (p. 627). Furthermore, elderly people today travel more for shopping and leisure trips after retirement than comparable age groups 20-25 years ago.	This research indicated that along with the aging population, more and more elderly people will own or use a car and will travel more, compared to older generation. This point is creative compared to previous study which mainly focused on the mobility impairment caused by aging. Thus, transportation system should adjust to the changing travel patterns of elderly people. In particular, attention should be paid to car use and leisure and shopping trips for elderly people.

Sarmiento, O., Schmid, T., Parra, D., Diaz-del-Castillo, A., Gomez, L., Pratt, M., Jacoby, E., Pinzon, J., & Duperly, J. (2010). Quality of life, physical activity, and built environment characteristics among Colombian adults. *Journal of Physical Activity and Health, 7*(Suppl 2), S181-S195.			
Best Addresses: health-related quality of life			
What/Why	How	Results/Findings	Implications
The article studied the association between health-related quality of life (HR-QOL) with physical activity (PA) and built environment (BE) in the adult population of Bogota.	The article used a questionnaire, which was administrated through face-to-face interviews to measure HR-QOL and PA. The World Health Organization and the Centers for Disease Control and Prevention instrument was utilized to measure HR-OQL in the survey. BE characteristics, including dimensions of density, diversity, designs, and access to mass-transit, were measured by objective scales, such as bikeways proportion within the street network. The model was developed with statistic tools to represent the association between HR-QOL with PA and BE. A multistage stratified sampling design was utilized, which produce 1,344 adult respondents from Bogota.	The survey achieved a 67.7% response rate. The validity of the scales were first evaluated through cognitive interviews. With the survey data, HR-QOL, PA and BE variables were eliminated in the process of model assessment. Adults who reported meeting PA recommendations and reported biking for transportation were more likely to have a high mean score of HR-QOL. BE and individual variables accounted for 65.9% of the variation in QOL at the block level. Mass-transit stations availability was negatively associated with HR-QOL.	The result showed that HR-QOL was associated with leisure physical activities, biking for transportation and BE characteristics, including bikeways proportion within the street network and distance/access transportation. The research pointed out that biking for transportation as the complementary PA is beneficial for citizen's QOL.

Renehan, T. (n. d.). Trends in quality of life in the EU: 2003-2009. Retrieved from http://www.eurofound.europa.eu/pubdocs/2010/47/en/1/EF1047EN.pdf.			
Best Addresses: quality of life			
What/Why	How	Results/Findings	Implications
To better assess the level of well-being in a country, economic indicators are important, yet insufficient. "Policy should be assessed in terms of how it directly promotes citizens' welfare" (p. 1). Citizens' own evaluations of the quality of their lives are, thus, important to policy makers. Renehan's research aimed to study the trend of European quality of life (QOL) from 2003 to 2007. Special attention has paid to how current financial crisis influence European QOL.	The study was based on the results of three European QOL surveys, which were conducted in 2003, 2007 and 2009, respectively. The article didn't give details about how the surveys were conducted; however, it justified that "the results from these surveys are both representative for the countries, and comparable between the surveys"(p.2).	The research found that satisfaction with life and standard of living increased from 2003 to 2007, while they dropped between 2007 and 2009, which indicated the influence of financial crisis on perception of quality of life. The research also found that more people feel societal tensions, for example, among ethnic groups and ages, as well as distrust in institutions and citizens. Renehan stated that these two indicators are important to the quality of the society. Nevertheless, satisfaction with family life, job and health remained stable from 2007 to 2009. The research concluded that the "financial crisis has been associated with a decline in some aspects of quality of life and the in the perceived quality of society" (p. 8).	The research presented how to evaluate quality of life at the level of society and population. In addition, one interesting thing of the research is that when measuring severe hardship, two indicators the research used were "being unable to afford meals with meat, chicken or fish every second day", and "being unable to afford a week's annual holiday away from home." This indicated that the researcher believes that taking week's annual holiday away from home was the basic need of human.

Anonymous (n.d.). City of Stockton. Quality of life in Stockton -- transportation. Retrieved from http://www.stocktongov.com/qualityoflife/transportion.cfm			
Best Addresses: City Marketing			
What/Why	How	Results/Findings	Implications
Transportation is an important indicator of high quality of life, when local governments promote their communities. The city of Stockton, California introduced the quality of their transportation system in their website to present the high quality of life in Stockton.	To prove the city has a high quality of life in the aspect of transportation, the website states on the top of the page that "whether it is by land, sea, or air, the phrase ' You can get anywhere from here ' applies well to Stockton". This indicates that transportation equals accessibility when it is introduced as an aspect of quality of life. Then, the website introduces the city's highway system, rail transportation, port of Stockton and the deep water channel, and Stockton Metropolitan Airport.	The Stockton website suggests that as a city with high quality of life, Stockton is accessible by highway, train, sea and air.	Local governments consider transportation as an important aspect of quality of life. In this context, transportation refers to accessibility which means how easy and efficiently people can get around.

St. Louis County (n.d.). St. Louis County Strategic Plan 2000-2004: Issue paper transportation. Retrieved from St. Louis website: http://www.co.st-louis.mo.us/plan/Comp-Plans/Strategic-Plan/trans.pdf.			
Best Addresses: transportation			
What/Why	How	Results/Findings	Implications
The purpose of this report was to provide information about transportation for the St. Louis County Strategic Plan 2000-2004. The information included transportation trends, needs for transportation and the role of county in transportation in St. Louis.	The researchers conducted telephone survey regarding the direction of planning for the County. 617 respondents were telephoned with the questions about the priority of transportation related issues, such as MetroLink expansion, Lambert Airport and parks and recreation, and their quality of life. The report did not give the information about response rate. The researchers also held a discussion about the strengths, weaknesses, opportunities and threats (SWOT) facing St. Louis County among senior elected and appointed officials of St. Louis County government. In addition, nine community forums were held to solicit discussion and ideas from County residents. The SWOT of St. Louis County was also discussed in the forums.	The report identified six major themes within transportation: including mobility, accessibility, mass transit, multi-modal facilities, safety and congestion, and infrastructure capacity and maintenance. Transportation situation in St. Louis was summarized within the six themes respectively. Surveys, focus groups, community forums and the County government officials' SWOT analysis identified critical needs of transportation in St. Louis, including needs for "walkable" communities, environmental concerns, desires to expand Metrolink and bus transit, and improvement of comprehensive transportation planning. The report also stated that "transportation is a very broad term and one that means different things to different people"(p. 73). The discussion among senior elected and appointed officials of St. Louis County government identified quality of life as a very important issue for strategic plan and "St. Louis County's location within the region and nation as well as the current MetroLink system and highway infrastructure were also cited as quality of strengths of St. Louis County" (p.72). In addition, the report identified the responsibility of transportation system sharing among the County's departments and agencies, including St. Louis County Department of Highways and Traffic, the Missouri Department of Transportation, and East-West Gateway Coordinating Council. The roles of these departments and agencies were outlined in the report.	The report presented what is transportation system from the view of practitioners. The transportation themes developed in the research could be adopted in practice and research.

In-Touch Survey Systems, Inc., & William & Keye, Inc. (2010). Minnesota Department of Transportation: Quality of life pilot study and framework. In-Touch Survey Systems, Inc.			
Best Addresses: quality of life and transportation			
What/Why	How	Results/Findings	Implications
The pilot study aimed to understand MN/DOT customers' measurable definitions of quality of life (QOL). Three topics were addressed in the research: (1) Which factors contribute or detract from QOL; (2) In which ways transportation both contributes to and detracts from QOL; (3) What the role of MN/DOT plays in promoting QOL.	The researchers conducted five focus group discussions in Twin Cities metropolitan area. Participants were randomly drawn from a telephone census block sample purchased list. Participants were screened to meet six criteria, including age, job and residency. When discuss quality of life and transportation, the moderator of focus group didn't give detailed explanation or definition; however, The contributors and inhibitors of QOL were studied with the given factors of QOL, which are developed from literature review.	The research finds 13 broad categories of factors influencing QOL, including education, health and transportation. —Family life" and —health" are identified as the major contributors to QOL, while —Economy's impact of your life" is identified as the major inhibitor. All factors of QOL are perceived as only contributors or inhibitors; however, the numbers of times these factors selected as contributors or inhibitors are different. For example, transportation was more times selected as an inhibitor than as contributor, while the situation of family life is the opposite. The result also shows that whether —unaided" or —aided", the factors that define or describe QOL were similar across all groups. The research also finds three most often-mentioned biggest transportation contributors to participants' QOL: ease of traveling around the Twin Cities metro area, choice/variety of transportation options, and getting around by public transit. The result shows that —perceptions of the transportation system differed depending on age, personal circumstances and to a certain extent their community" (p. 16). In addition, many participants are found having limited view of what comprises a complete transportation system. The aspects of transportation, including roads, buses and air travel, are not necessarily discussed as a —system". The transportation system expectation and perception of MN/DOT and its influence on QOL are also explored in the study.	The research describes how people perceive two fundamental concepts: QOL and transportation. It indicates that the understanding of QOL has more awareness and uniformity than the understanding of transportation.

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